April 9, 1986

Memorandum

To: Superintendent, Glen Canyon National Recreation Area, Page, Arizona

From: Field Supervisor, Ecological Services, Phoenix, AZ

Subject: Biological Opinion, Lees Ferry Development Concept Plan D18

This is in response to your request of March 14, 1986 for formal Section 7 consultation, as provided by the Endangered Species Act of 1973 (as amended), on the Lees Ferry Development Concept Plan, Glen Canyon National Recreation Area, Coconino County, Arizona. The species of concern is Brady pincushion cactus (Pediocactus bradyi). A list of species was provided to the National Park Service (NPS) on October 2, 1985.

The following background information and biological opinion are based on information furnished by the NPS and data in our files.

Background Information

The Lees Ferry developed area is the access point for visitor use of the Colorado River below Glen Canyon Dam. Rafting trips through the Grand Canyon originate at Lees Ferry and it is the pull out point for one-day raft trips from Glen Canyon Dam. Rafters make up 40% of the visitor use in the area while fishermen make up another 50%.

The NPS proposed plan would improve the developed facilities at the Lees Ferry area and result in an improved aesthetic and educational visitor experience. Development of a new visitor contact/administrative building, improved river launching facilities, improved vehicular circulation (involving road closures and reconstructions) as well as improvements to camping and picnic areas will be accomplished. The plan also provides for increased staffing.
Brady pincushion cactus is a small, semi-globose cactus with one or more stems up to six cm tall and five cm in diameter. The cactus tends to retract into the soil during the dry season, emerging during the rainy season. The Brady pincushion cactus was listed as an endangered species on November 26, 1979.

Brady pincushion cactus is known from approximately 70 km² in Coconino County, Arizona on soils derived from the Moenkopi shale and sandstone outcrops overlain with chips of Kaibab limestone (USFWS 1985). Potential and actual habitat occurs on Bureau of Land Management lands, Glen Canyon Recreation Area, Navajo Indian Reservation, private lands and possibly Grand Canyon National Park. A recovery plan has been developed by the Fish and Wildlife Service and a Habitat Management Plan for the populations on BLM land (BLM 1985) has been developed. The primary threats to this species is collection and habitat disturbance.

**Impacts of the Action**

The NPS preferred action will close and obliterate the road to Motel Hill and not allow any facilities in that area. The Motel Hill area is the nearest site to the Brady pincushion cactus. Elimination of vehicular access and thereby most, if not all visitor use, will enhance protection of the cactus. The funding of additional NPS employees would also serve to increase protection for the cactus by enabling better monitoring of visitor activities.

**Biological Opinion**

It is my biological opinion that implementation of the NPS proposed Lees Ferry Development Concept Plan is not likely to jeopardize the Brady pincushion cactus but will promote the conservation of this species and is therefore a beneficial action.

Further consultation is not required unless new species are listed that may be affected by this project, new information becomes available that reveals impacts not considered in this opinion or substantial changes are made to the NPS preferred plan.

We thank you for your interest in conserving endangered and threatened species.

Gilbert D. Metz
Field Supervisor

cc: Director, Arizona Game and Fish Department, Phoenix, AZ
    Regional Director, FWS, Albuquerque, NM (AHR)
    FWS/OES, Washington, D.C.

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